

10/524168

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number
WO 2004/014948 A2

(51) International Patent Classification⁷: **C07K 14/47**

(21) International Application Number:

PCT/EP2003/008711

(22) International Filing Date: 6 August 2003 (06.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

02017524.6

6 August 2002 (06.08.2002) EP

(71) Applicant and

(72) Inventor: **BECKER-KOJIC, Zorica** [DE/DE]; Bothestrasse 33, 69126 Heidelberg (DE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **TERNESS, Peter** [DE/DE]; Hecker-Strasse 24, 69124 Heidelberg (DE).

(74) Agent: **SCHÜSSLER, Andrea**; Truderinger Strasse 246, 81825 Munich (DE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **GPI ANCHORED GLYCOPROTEIN ACA AS A NOVEL TUMOR MARKER**

(57) Abstract: Described is a GPI-anchored surface glycoprotein having a GPI-anchor which is characterized by a non-acetylated inositol ring and diacyl glycerol as lipid tail of the anchor. A particular glycoprotein of the invention, ACA, is strongly expressed in melanoma cells and some leukemia cells, thus, is an useful marker for diagnosis of said tumors. The invention also relates to salts, functional derivatives and active fractions of ACA having substantially the same spectrum of biological activities of ACA. The invention also relates to a process for the purification of ACA, to its cloning and its production by recombinant DNA techniques. It further relates to diagnostic compositions comprising an anti-ACA-antibody or an oligonucleotide probe capable of hybridizing to ACA-mRNA and to pharmaceutical compounds containing a compound capable of reducing the expression of ACA or the activity of the protein.

WO 2004/014948 A2